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THE PORT OF BOSTON

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*A Foreign Market for the Surplus
Products of New England*

NATIONAL SHAWMUT BANK

DECEMBER, 1916

opposed to all this foreign trade talk.' Let well enough alone was the text on which he preached throughout the meal. I have a liking for actual figures behind arguments and at last hinted for them in a general way. He reached into an inside pocket and drew out a list of that month's orders. 'Here is what domestic business means,' he remarked, as he handed it to me. Of the one hundred *largest* orders I found that *eleven were from Canada.*"

The National Shawmut Bank trusts that the facts presented herewith will stimulate the interest of the New England public, manufacturer and merchant in this great question of national commercial preparedness, and in particular, offer an incentive to the younger generation to get a training and a wider experience in a field in which up to recently there has been little inducement to enter.

A short bibliography of articles, studies and books on the particular matters here discussed is annexed.

II.

THE GENERAL SITUATION.

"One week of the European War did more than ten years of academic discussion to convince the American people that foreign trade is a vital element in domestic prosperity." —JAMES A. FARRELL, *President United States Steel Corporation.*

An unprecedented proportion of American labor and invested capital is now dependent upon foreign markets. The most interesting commercial development of the two years of the war has been the entry into foreign trade of smaller manufacturers, who, grasping oversea opportunities, have gained a wider outlet as a balance against domestic depression. The intelligent wage-earner, who was formerly indifferent as to where the products of his labors were sold, is now also beginning keenly to realize that his continued employment depends in a great measure upon a sustained foreign demand. The great war has not changed the situation, it has only intensified it. Without warning, it has forced on the United States the duty to go into unfamiliar markets and supply there the wants of a large part of the world, formerly provided by the great industrial and exporting nations of Europe.

When the United States abandoned the sea after the Civil War, and devoted itself to building up its domestic trade, the nation was content to allow its sea service to be performed for it by foreign carriers. The crude materials and foodstuffs which thirty years ago were the large bulk of our exports, did not call for skill in salesmanship; the rest of the world simply could not get along without them, and, engrossed in our other affairs, we were satisfied to permit foreign nations to carry our goods at their own rates, and in a way even to control the price of our commodities.

The fact that our exportations of raw materials and foodstuffs have been steadily diminishing and that of our industrial products increasing, has not been generally understood. In 1880 our export of raw materials to manufacturers was as 85 is to 15; in 1913 it was as 51 is to 49. We are now called upon still further to increase our exports of manufactures of the newer complicated development, in a field formerly monopolized by our foreign competitors. With this demand is forced the realization that the United States can no longer continue the folly of allowing our products and their markets to be controlled by a carrying trade owned by our competitors. At the hour of the country's greatest need and opportunity, the ships upon which we depended to transport our goods, were either sunk, interned or put into use for war purposes, and our ability to supply the insistent demand for our products has been restricted and in part nullified. This war, therefore, has had the good effect of forcing us to appreciate the importance of a foreign trade to be carried in our own ships, and has awakened the nation to the opportunity for leadership to which its position as the greatest producing country in the world entitles it.

With about one-fourteenth of the world's area and about one-seventeenth of the world population, we control of the World's

Corn 75 per cent.
Copper 50 per cent.
Manufactures 30 per cent.
Banking power 35 per cent.
Cotton 66 per cent.
Iron 40 per cent.
Wheat 25 per cent.
Wealth 30 per cent.*
Petroleum 66 per cent.
Coal 44 per cent.
Railways 40 per cent.

In the first twenty-two months of the war ending July first of this year, the excess of exports over imports gave the United States a favorable trade balance of three and one quarter billions. Since the European governments were unable to pay for these products in merchandise, they have surrendered gold, until our gold reserve has so far exceeded all records that it supports a structure of domestic and foreign credit unprecedented in the history of the world. To get back this gold is essential to the restoration of European prosperity after the war is over, and this is one of the objects of the economic alliances now being devised. Plans are being laid abroad for more extensive competition, in an attempt to bring back the trade, which due to the war, has given our merchandise greater access to European markets and a larger share of the trade of neutral countries. Any violent disturbance of the flow of gold after the war will necessarily disturb rudely the structure of the banking credits built upon it. Our primary safeguard is stimulation of exports from the United States, of the merchandise required in peace, to take the place of the present abnormal demand and prices for munitions, etc.

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*O. P. Austin, Statistician, National City Bank, N. Y.

That we will for a time send goods to Europe in lessened quantities is inevitable, but if the plans of the present alliances are successfully worked out, they can easily be carried so far as artificially to restrain foreign trade and normal equity in world commerce. This will be made very much easier for our competitors to accomplish if we lack the ability to carry our own products abroad.

As pointed out recently by the National Foreign Trade Council, if the members of either the Entente or the Central Economic Alliance seek by artificial tariff duties to prefer each other in their respective colonies, a discrimination against the products of the United States will be automatically created. If special shipping arrangements are accorded, so far as artificially to create lower rates for allied rather than for neutral commerce, the parity of ocean freight commerce to and from American ports, as compared with that to and from European ports, which has been one cause of toleration of American dependence upon foreign carriers, will be disturbed.*

It is remarkable that the scientific methods which have been introduced in every department of commercial activity in the United States, and the change of attitude on the part of managers of large enterprises which has shifted emphasis to points remote from where it formerly rested, have until recently made only a small development in the line of controlling facilities for reaching our oversea markets. Our Great American industrial corporations have recently, however, found it necessary to supply not only their present but their potential markets by providing ships to carry their products to the markets of the world, and vessels of the Standard Oil Company and United States Steel Corporation, among others are now found on every sea. What the power and resources of these mammoth corporations can make easily possible for them is *not* possible to the average producers of manufactures, food and farm products, and in their interest, relief of the general situation, where the nation's business is now dependent on foreign shipping interests which can control prices and markets, is the immediate duty of the whole United States and particularly of New England and Massachusetts.

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* "European Economic Alliances." National Foreign Trade Council, New York City, September 1916. Pages 9 and 10.

III.

NEW ENGLAND AND MASSACHUSETTS.

New England is today in comparatively the same position that it was after the Napoleonic wars, when its merchants took quick advantage of the troubles in Europe rapidly to increase the carrying trade of the world and to reap for themselves handsome fortunes from the enormous profits made therein.* *The foundations of the wealth of Boston were in commerce, and its future is indisputably in the same direction.* During the early part of the 19th century its merchants absorbed the carrying trade of the world. It is only 76 years since the Cunard Steamship line chose Boston of all the cities on the Atlantic coast as its principal terminus on this continent, and this commercial eminence continued until the development of American railroads diverted the existing avenues of commerce, and Boston lost its leadership.

During the last generation, especially, artificial distinctions and unfair rules as to rates, etc., have brought about the situation which Massachusetts and Boston are faced with today. In addition to its railroad isolation, Massachusetts has had the disadvantage of being made the laboratory in which all kinds of social legislative theories have been worked out for the benefit of the rest of the country. Considering the disadvantage to the manufacturers of this state in the multiplicity of special laws which are not in force in competing states, and the accompanying extra burden of taxes, excessive cost of freight, and lack of proper interchange of facilities, the Commonwealth has made remarkable progress, which has operated to allay apprehension and to stop inquiry as to whether this progress is comparatively as great as it should be considering the industrial advance of competing states.

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* Historic Towns, Boston. By Henry Cabot Lodge. 1894.

The leadership of Massachusetts in its principal industries is shown in the chart on the following page, which gives the proportionate distribution by states of annual production of boots and shoes, cotton goods, and woolen and worsted goods.*

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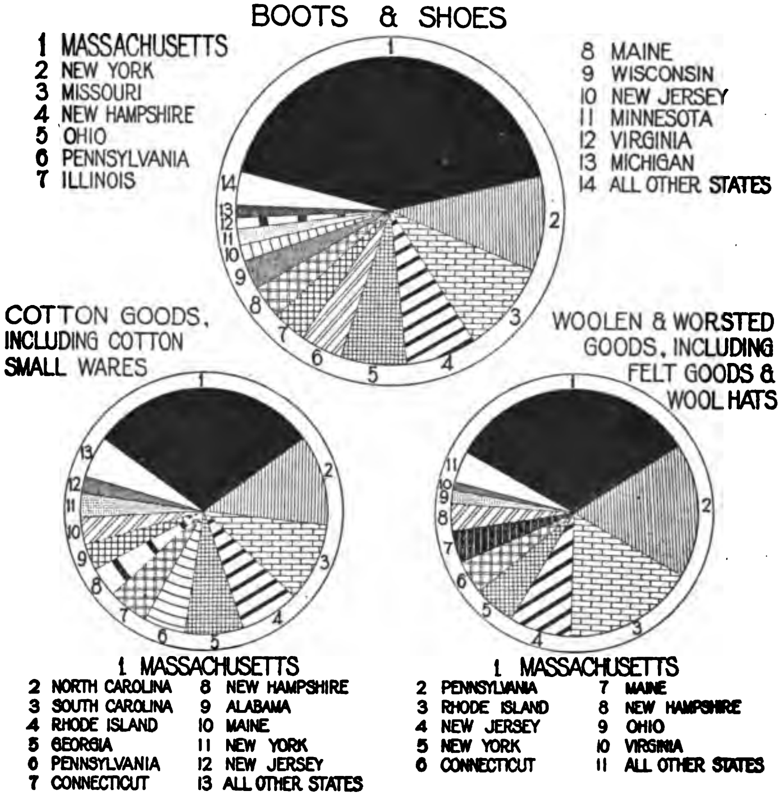
* The Industries and Foreign Trade of Massachusetts. Prepared by the Chief of the Manufactures Division, Bureau of Statistics, State House, Boston. 1916.

CHART 1.

MASSACHUSETTS LEADERSHIP
IN BOOTS & SHOES, AND THE TEXTILES
PROPORTIONATE DISTRIBUTION BY STATES OF ANNUAL PRODUCTION OF BOOTS AND SHOES COTTON GOODS, AND WOOLEN & WORSTED GOODS



IV.

COMMERCIAL PROGRESS OF MASSACHUSETTS.

While Massachusetts occupies fourth position among the commonwealths in the value of its manufactured products, and first in the production of boots and shoes and cotton goods, nevertheless the comparatively greater progress industrially of some of the other states is sufficient reason for a real awakening to the fact that this Commonwealth must bend every effort towards procuring a still larger share of the business of this country and of the world for manufactured articles. The fact that Massachusetts now enjoys a foremost position in manufacturing, with one of the best supplies of labor to be found anywhere, coupled with the enormous physical equipment for extending production, is a strong reason for the contention that we should reach out for a still greater share of increasing business. History has shown repeatedly that the strongest nations, with the greatest resources and opportunities for economic development have gradually lost position until formerly weak political units have passed them in industry, and consequently in power.

Business competition in the United States has become so keen that mere progress from within is not sufficient. To insure a place of foremost rank in the years to come, there must be greater comparative progress in competition with other political divisions.

Comparative analysis of manufacturing statistics in the United States since 1880 indicates that on the basis of rate of progress, Massachusetts does not compare too favorably with some other states. In making this comparison figures taken from the United States Census of Manufactures for 1880, 1890, 1900, 1905 and 1910 are used as a basis. At the outset the statement should be made that this comparison is necessarily subject to a certain percentage of error due to different methods used in compiling the census for different years, and also because of the fact that in taking the value of the product as a unit of measurement there are bound to be fluctuations in the value of the dollar, and in the quantity of goods which can be purchased for a dollar. For the purposes of this study, however, the figures should show a fairly dependable general tendency of conditions in one state as compared with another. The purpose of the analysis is one of comparison between states, rather than a comparison of industries over a series of years, and for that reason any changes in the methods of compiling the census from period to period will not destroy the value of the study.

By developing the subject on the basis of all manufactures combined, we get a complete analysis of the industrial standing of the Commonwealth, and thereby take account of the development of new industries as well as those which for some time have been in the class of large scale industries. By selecting boots and shoes and cotton manufacturing, we furnish a test of the standing of Massachusetts in two of the industries in which lies her greatest strength. In both of these industries the Commonwealth is far ahead of the other states in the absolute volume of the product as measured by its value. The purpose of this analysis, however, is not primarily to bring out the fact that this is an important manufacturing state. In the present development of business, when no one knows definitely what the future holds in store, we should free ourselves of any feeling of over-confidence and determine whether our rate of progress has been as great as might be expected. It is necessary that this should be determined for two reasons: first, in order that full advantage may be taken of those methods and conditions which have been responsible for success, and second, in order that every possible weakness may be detected and measures taken to correct the deficiencies.

To ascertain the standing of Massachusetts, therefore, for the purposes as stated above, it is more important to determine not how this state compares with others on the basis of its absolute volume of manufactures, but at what industrial rate the Commonwealth of Massachusetts has grown as the country has grown and as other states have grown. *

I. Industrial Standing Based on Total Manufactures.

Table I in the appendix shows the volume of manufacturing as measured by the value of the product, for the years and divisions indicated.** The figures represent billions or millions of dollars as the case may be, with the last three places omitted.

Massachusetts in 1880 occupied third position in the value of its manufactured products. In the following decade and at each census since that time her position has been fourth due to the forging ahead of Illinois in the industrial field. The United States as a nation has had a remarkable growth, and each of the other states shown has increased its manufacturing to a considerable degree. The rate of progress of the Commonwealth of Massachusetts however has been slower than any of the other states here considered.

Chart 2 shows the general comparative rate of increase between the different divisions for the period 1880 to 1910.

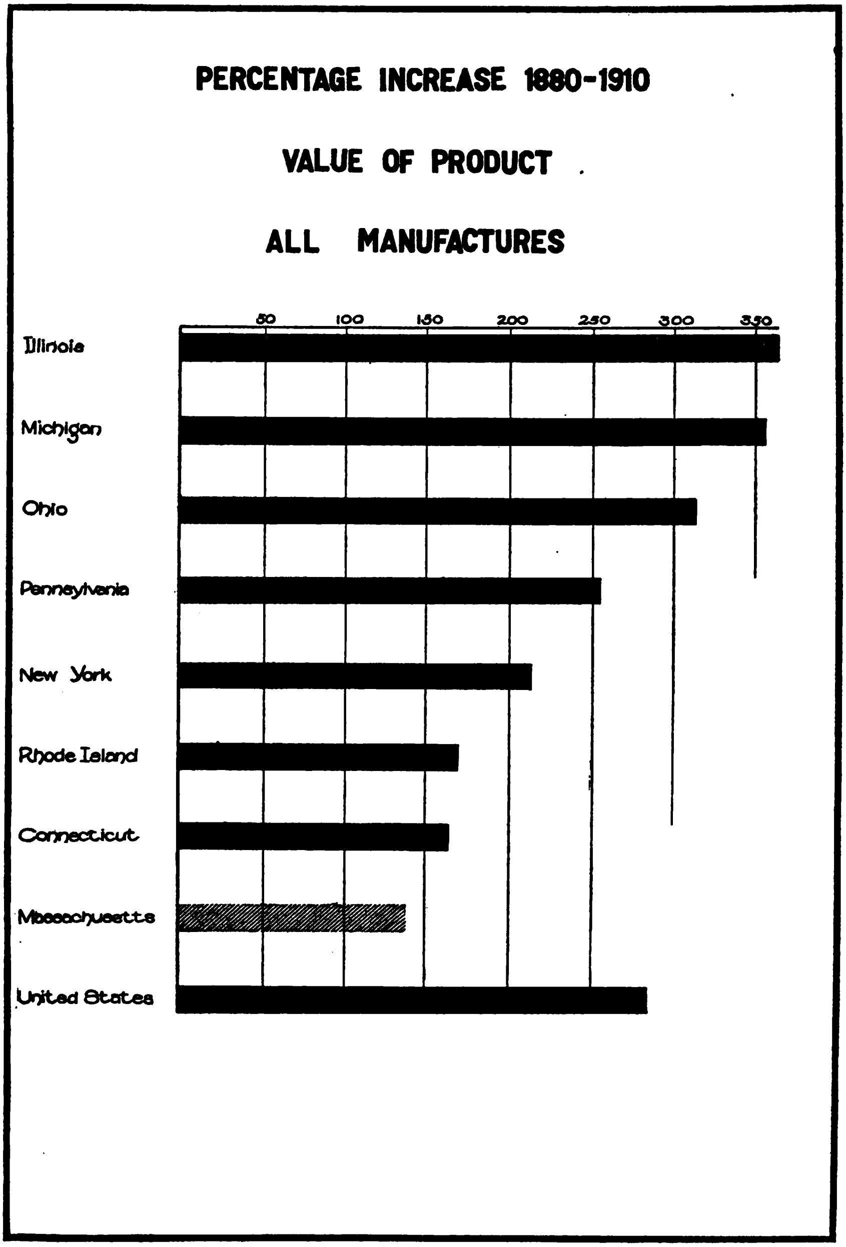
In this period while the total manufactures for the United States had increased 285 per cent. that of Massachusetts was only 136 per cent. Illinois, Michigan and Ohio increased

---

* In making such a study there is obviously considerable difficulty in eliminating entirely the effect of statistical error present in the basis figures. No attempt has been made to reclassify the data for the different periods, since that is not so necessary in a study of this nature in which comparison is made between the political divisions considered largely on the relative experience of each in each period as compiled. Although there may be a certain error in comparing the year 1880 with 1910 for the United States, and likewise any other state with itself over a series of years, this error should be considerably less when the groups are compared on a basis in which the errors of each period are common to each state. With these explanations in mind the analysis as outlined above is given with tables and charts to bring out the more important features of the figures.

**The tables on which these charts are based will be found in the appendix.

CHART 2.

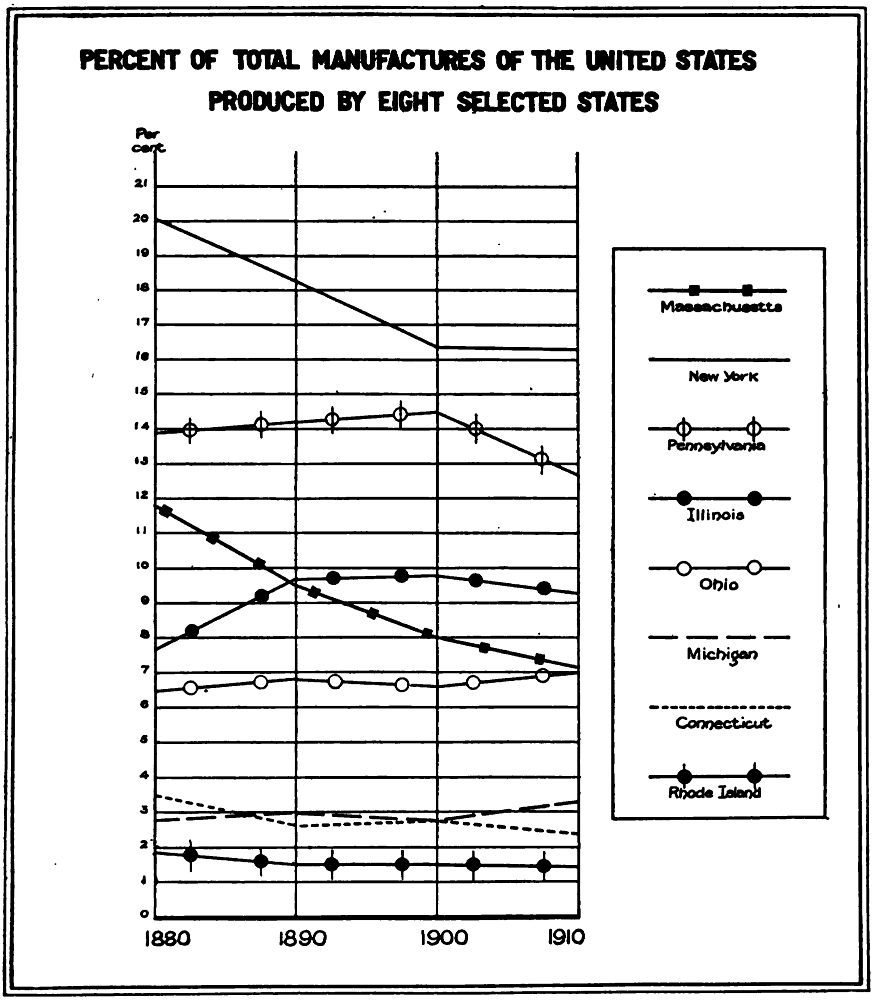


PERCENTAGE INCREASE 1880-1910

VALUE OF PRODUCT

ALL MANUFACTURES

CHART 3.


PERCENT OF TOTAL MANUFACTURES OF THE UNITED STATES
PRODUCED BY EIGHT SELECTED STATES
Per cent
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
1880
1890
1900
1910
Massachusetts
New York
Pennsylvania
Illinois
Ohio
Michigan
Connecticut
Rhode Island

over 300 per cent; Pennsylvania and New York increased over 200 per cent.* The three remaining states with Massachusetts at the bottom of the list increased over 100 per cent. For the decade 1900-1910 this order is not the same. In the shorter period the state with the highest rate of increase is Michigan with an increase of 114 per cent. This is due largely to the growth of the automobile industry. Massachusetts increased 64 per cent and instead of being last in this period, is followed very closely by Pennsylvania and Connecticut, so that her position is sixth among the states shown.**

If we compare the percentage of manufacturing for Massachusetts over the period from 1880 to 1910 there is distinctly a tendency which is progressively downward. Other states show a general downward movement, but there is more fluctuation and a tendency to hold more nearly level towards the end of the period. From 1900 Pennsylvania has definitely had a downward tendency; Michigan and Ohio have tended upwards at the last census period, and the general movement is upward; Illinois jumped sharply between 1880 and 1890, and since then has had a slight decrease. Connecticut and Rhode Island have lost slightly the proportion of manufacturing held in 1880. Chart 3 shows in graphic form the percentage of the total manufacturing business of the United States held by each state, and illustrates the general movement on this basis for the different periods chosen from 1880 to 1910.*** The most important fact brought out by these curves is the constant decrease of Massachusetts in its share of the total manufacturing business of the country since 1880.

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*Table II appendix.

**Some objection might be offered to this method of comparison on the ground that a new manufacturing state might show a remarkable increase which would be impossible for an older state approaching the limit of its capacity, if it were not for the fact that some of these states are ahead of Massachusetts and others are not very far behind. Although Massachusetts has grown, and growth is an indication of progress, the future industrial welfare of Massachusetts will not be under the most efficient guidance unless attention is given to the comparative rate of progress of other states. In other words, our progress should not be measured solely from within, but should be tested externally by the most rigorous standard of measurement that can be discovered.

***See Table III appendix.

II. *Comparative Industrial Standing in the Production of Boots and Shoes.*

In the production of boots and shoes Massachusetts equals almost the remainder of the states combined. In this respect, therefore, there is no immediate cause for worry in so far as the present is concerned. The attitude represented by this statement, however, is not the spirit in which this is written As previously stated the standard of measurement is designed for the purpose of determining whether we have progressed as fast as other states. Failure to progress as fast as some other states is not necessarily proof that this state is in any danger of losing its rank as a shoe producing state, but it is proof that there is business which this state might possibly procure if proper steps to this end were taken. If there is any danger that the state may not obtain a comparative increasing amount of this business this fact should be known in order that the situation may be studied.*

Chart 4 shows that the amount of product manufactured in Massachusetts increased 146 per cent in the period from 1880 to 1910. All the other divisions shown, however, except Pennsylvania, increased at a greater rate. Missouri has had a wonderful extension of her shoe manufacturing business with an increase of over 2,300 per cent. in this period. Ohio, New Hampshire, and Illinois, also, have increased at a rapid pace, with increases of 657, 445 and 426 per cent. respectively. In the period 1900-1910, the order of the states based on the size of the increase is different, with Missouri, however, still growing at a rapid rate. Massachusetts is fifth on the list of states in this period as compared with sixth position for the thirty year period from 1880 to 1910. Massachusetts produces almost half the boots and

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*See Tables IV and V in appendix.

CHART 4.

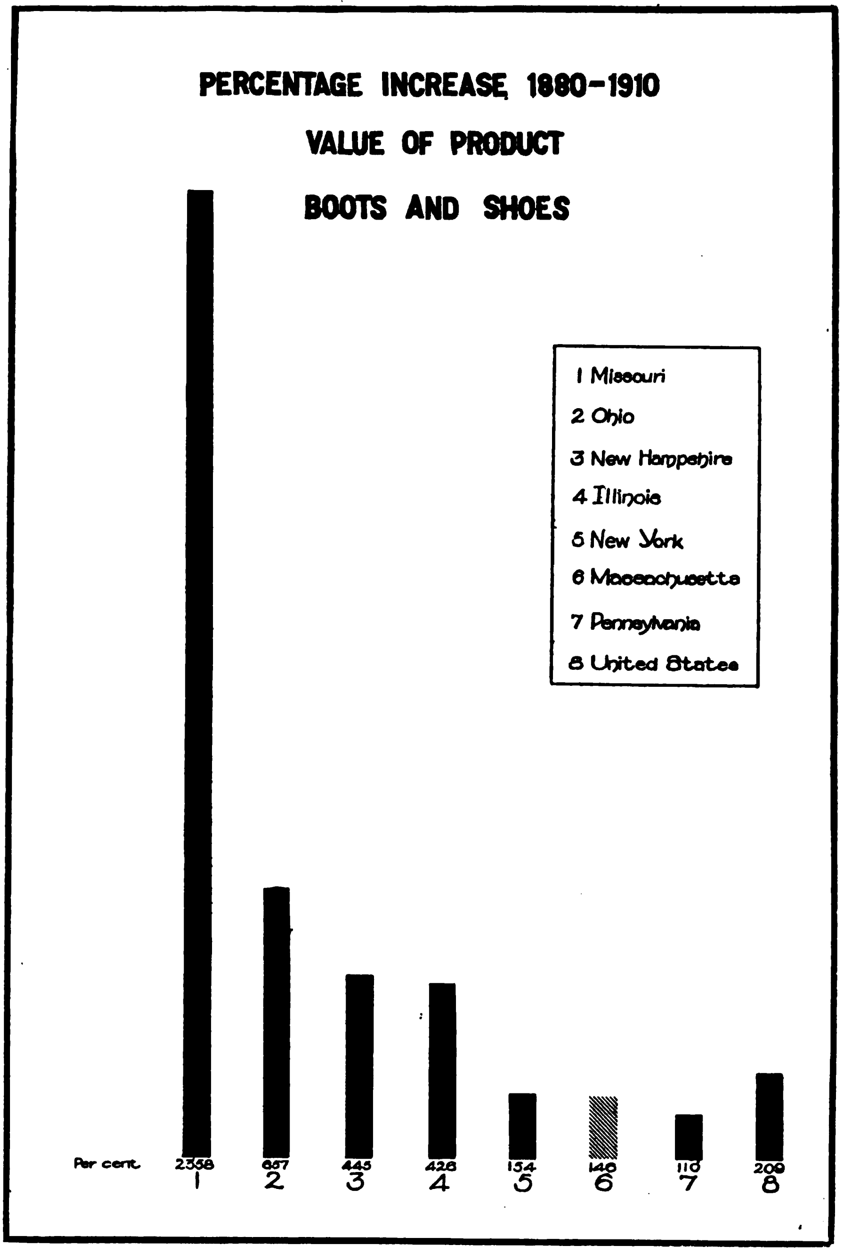
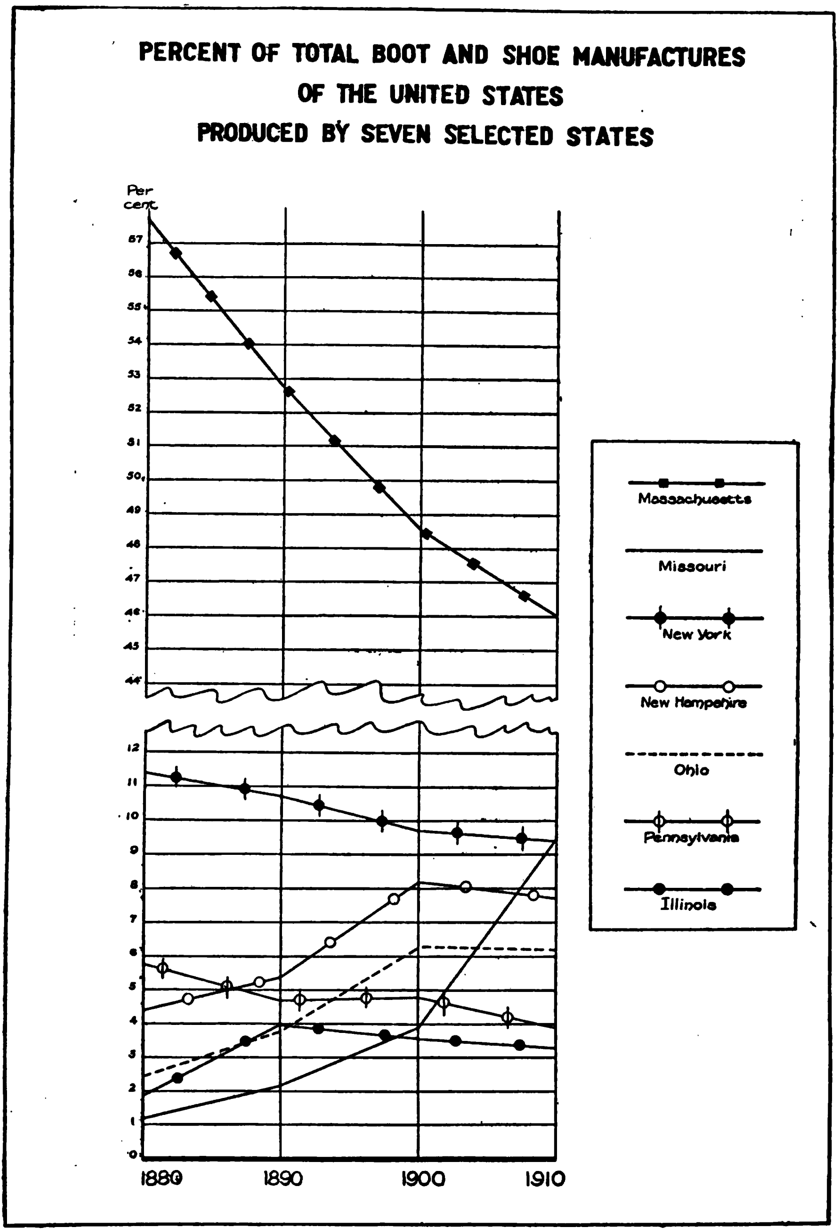

PERCENTAGE INCREASE 1880-1910
VALUE OF PRODUCT
BOOTS AND SHOES
1 Missouri
2 Ohio
3 New Hampshire
4 Illinois
5 New York
6 Massachusetts
7 Pennsylvania
8 United States
Per cent.
2358
657
445
428
154
146
110
209
1
2
3
4
5
6
7
8

CHART 5.



PERCENT OF TOTAL BOOT AND SHOE MANUFACTURES OF THE UNITED STATES PRODUCED BY SEVEN SELECTED STATES shoes made in the United States, but the proportional share of business has decreased from 57.7 per cent in 1880 to 46.1 per cent in 1910.* Missouri in this same period has risen from the last position to that of second place. Chart 5 gives a clear idea of the general relative standing of the states with reference to the amount of business carried on in the manufacture of boots and shoes. Detailed analysis of the character of shoe products of the United States, during the last quarter century, not possible in the space of this article, would show that the growth in shoe-making in the Middle West has been in the cheaper grades of heavy shoes, which twenty-five years ago was a large part of the Massachusetts output. The improvement in shoe manufacturing machinery, the nearness of the Middle West to the sources of raw material, as well as to the consuming population for this class of shoes, with other advantages in rail transportation and labor costs, due to location, gave the shoe manufacturer of this section the opportunity to begin the manufacture of low-priced shoes, and this in turn forced the Massachusetts manufacturer, with his large manufacturing experience and equipment, and supply of skilled, high-priced labor into the manufacture of shoes of the better and best grades, in which today this state leads the world.

During this period, the Massachusetts shoe manufacturer has been turning out better shoes every year, and has increased his annual output. The inevitable tendency of shoe manufacturing competitors in the Middle West, now comparatively in the same position Massachusetts was twenty-five years ago, will be to increase the quality of output, and in the interests of a nation-wide shoe trade, and especially of Massachusetts, the opportunities for expansion for all, due to the opening of foreign markets, should be pointed out and accepted.

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*See Table VI in appendix for distribution of the Boot and Shoe Manufacturing business of the country among these states.

III. *Comparative Industrial Standing in the Production of Cotton Goods.*

In the production of cotton goods, Massachusetts also leads the other states, although the margin of difference is not so great in this branch of manufacturing as in that of boots and shoes. Under this section the same standards of measurement are employed as in the preceding sections. Table VII in the appendix furnishes the basis on which the analysis is made.

In the period 1880-1910 Massachusetts of the states here considered stood second last in the rate of increase, and in the decade 1900-1910 occupied the same position. In this period Rhode Island went ahead of Massachusetts on the basis of relative increase in business, reversing positions with Pennsylvania which in the thirty year period was in third last position. The rapid rate of progress in the case of North Carolina, South Carolina, and Georgia is worth particular attention. Furthermore while the entire cotton manufacturing business of the United States has increased almost 230 per cent in a period of thirty years, that of Massachusetts increased about 160 per cent. Chart 6 illustrates graphically the percentage of increase in the thirty year period for each division.*

Table IX in the appendix shows the comparative proportion of the total cotton manufactures of the United States for each state, and based on this table Chart 7 brings out the tendencies prevalent in the period under consideration.

In this branch of manufactures, also, Massachusetts has gradually lost her proportional share of the business, although the proportion in 1910 is slightly higher than in 1905. The three southern states, North Carolina, South Carolina and Georgia have gradually increased the proportion held by each.

The development of cotton manufacturing considered geographically is dependent on a variety of conditions, as follows:

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*Table VIII in appendix gives the percentage increase for 1880-1910 and 1900-1910.

CHART 6.

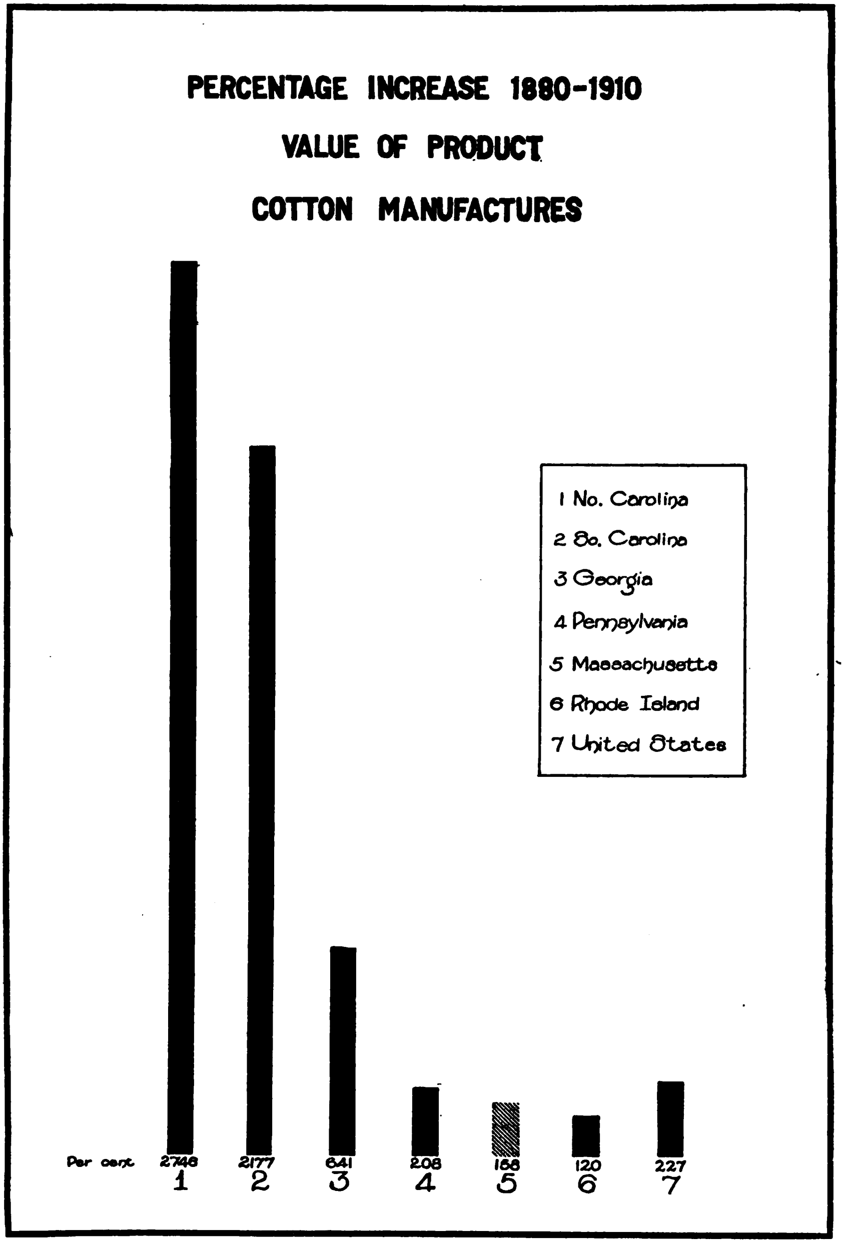
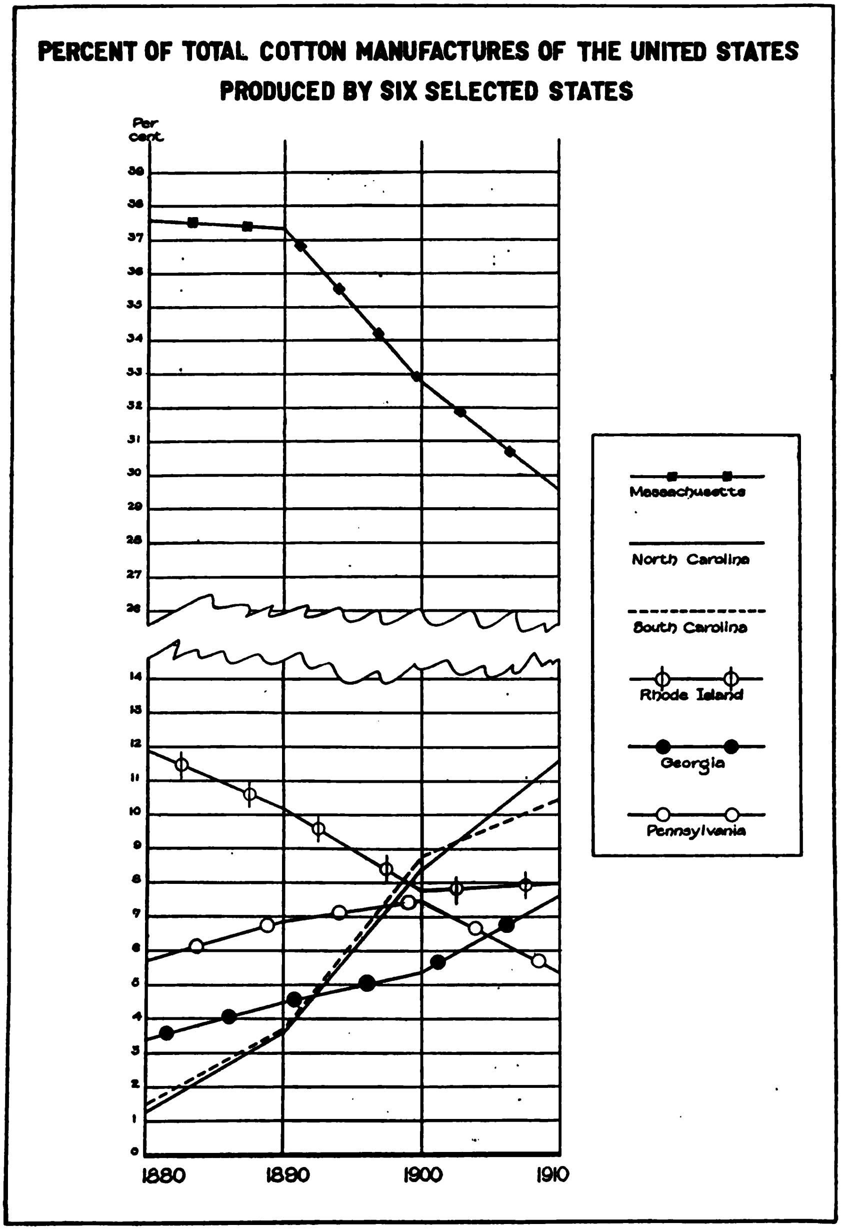

PERCENTAGE INCREASE 1880-1910
VALUE OF PRODUCT
COTTON MANUFACTURES
1 No. Carolina
2 So. Carolina
3 Georgia
4 Pennsylvania
5 Massachusetts
6 Rhode Island
7 United States
Per cent
2748
2177
641
208
168
120
227
1
2
3
4
5
6
7

CHART 7.



PERCENT OF TOTAL COTTON MANUFACTURES OF THE UNITED STATES PRODUCED BY SIX SELECTED STATES

(a) Relative cheapness of transportation of raw materials to competing regions;

(b) Nearness to market where finished goods are sold, to which we might add that nearness is important not only in point of miles, but in transportation service, rates, storing facilities, and rail and water connecting links.

(c) Economy of power.

(d) Supply of labor capable of adapting itself to this branch of industry.

(e) Spirit of state laws regarding the employment of labor.

These principles although here considered solely in connection with the cotton manufacturing industry are applicable generally to other branches of manufacturing in this state and are of extreme importance in the effort to increase our output and to make new opportunities for manufacturing.

Too great emphasis and reliance have been and are placed on the present position of Massachusetts as an important manufacturing state and too little attention given to the future. Based on this study, Massachusetts has not developed at as fast a rate as most of the other states considered, and has not compared favorably with the general progress of the country as a whole. This refers especially to all manufactures combined. In the boot and shoe industry the enormous volume of business, almost half that of the country, operates to nullify somewhat the growth shown by other states. In this industry the danger for the present is at least not that the state may fall behind absolutely, but on a strict standard of measurement may not reach its ultimate potential possibilities.

In 1880, Massachusetts produced about 72 million dollars worth of cotton goods against approximately 12 million in North Carolina, South Carolina and Georgia; in 1910 these three states produced an amount approximately the same as that produced in Massachusetts—that is, 186 million dollars. In 1880 North Carolina alone produced about one thirty-sixth of the amount produced by Massachusetts; in 1910 the production had increased to an amount approaching one-half that of Massachusetts.

In general there is need of a great awakening in the Commonwealth of Massachusetts to develop the machinery of production and distribution along constructive lines. There are present in the Commonwealth, physical equipment, labor, motive power, capital and long standing manufacturing experience. All that is needed is greater development and coördination of the auxiliary instruments by means of which these basic elements of production may be most effectively utilized.

As has been shown in the preceding paragraphs, Massachusetts in the face of many disadvantages has made remarkable commercial progress during the last twenty-five years, with one of the best ports in the country and subsidiary ports, its preparedness and power of expansion in the lines of manufacturing most needed today in the foreign market are so apparent that no argument is needed.

While the Southern states have certain advantages in the cotton manufacturing over Massachusetts, this commonwealth has many compensating advantages and climatic conditions, peculiarly favorable to the production of cotton goods. This combined with the best manufacturing facilities in the world; the skill of our workers and our position directly on the ocean gives us an advantage which properly utilized cannot easily be overcome.

The disinterested friendship which the United States has always shown for China has placed us in a different position from all the other nations of the world in regard to that market. During recent years, South America has begun to regard this country with an entirely changed and friendly attitude. Russia is now one of the best potential markets for manufactured goods that there is in the world. Africa has unlimited possibilities to which we have given very little attention.

Bulletin 115, Department of Commerce, calls attention to the fact that while there is a market for $14,000,000 worth of cotton goods in the Straits Settlement, the United States has a smaller share than any other competitor, the sales in the last four years before the war amounting to only $22,000 a year and a large portion of this being sold through British middle-men.

In a report to the Secretary of the Department of Commerce, dated July 28, 1916, the Chief of the Bureau of Foreign and Domestic Commerce calls attention to the fact that the cotton goods trade of the Dutch East Indies amounts to the enormous sum of $40,000,000 annually. In the imports of cotton clothing, Java ranks third in all the markets of the world, being exceeded only by India and China. As a neutral market in which it is becoming increasingly difficult for importers to secure their supply from Europe at prices which formerly prevailed, and in which our agents report a willingness to take up and introduce American cotton goods. This suggests a possible market for our goods which according to the official reports seem to have been neglected.

In the matter of boots and shoes we have always felt in Massachusetts that we have secured a supremacy which no other state in the Union could wrest from us. While our leadership is still supreme, the strides of competing commonwealths must force us to realize that this leadership is ours only so long as we can produce cheaper shoes than any other state, and that with the adverse factor of transportation and taxes, domestic competition will be increasingly difficult.

The introduction of American shoe machinery and instruction in shoe manufacturing methods in Europe has not prevented several Massachusetts shoe concerns from going into this foreign business and building up in competition the basis of a satisfactory trade even in England and Germany. The merits of American-made boots and shoes, which can compete in the organized industrial centres of Europe, may prove themselves in the newer foreign markets of South America, China, Russia, South Africa and India.

In 1910, the United States exported only about 2 per cent of its manufactures of shoes, and this was actually a higher percentage than was sent abroad in the year before the war. It further appears to be true that with the rapid advance in labor saving machinery in the shoe industry, it is possible to produce in nine months in the year, all the shoes that can be worn by the people of the United States in a full year. The possibility of unemployment and the other evil consequences which will come to the shoe trade if it cannot dispose of its surplus product in foreign countries, is obvious.

Let us for example assume that the 100 million people in the United States will each year wear out three pairs of shoes. All the factories of the United States can, by keeping their employees busy for fifty weeks in the year, turn out 400 million pairs. If we have no outside market, our shoe makers must reduce the output by one quarter. The interest charge on plant, taxes and overhead charges generally, will remain the same and other costs are not reduced in proportion. The price per pair for the 3 million pairs actually bought will be greater, while if it were possible to produce to full capacity and sell the surplus in the foreign market, even at cost, it would be vastly more profitable to the manufacturer; our own people would be able to get the shoes cheaper while the number of wage earners continuously employed would be greater. The benefits to be achieved and the evils to be avoided do not seem to need elaboration.

V.

PORT PROGRESS IN THE UNITED STATES

Due to the impetus given by the European contest, ship building is now proceeding at a greater pace than at any time since the Civil War. The fact remains, however, that the ports on the Atlantic seaboard are by reason of the systems in vogue not prepared to take advantage of their opportunities to do an increasing business profitably and economically even if ships now building or contemplated are supplied.

After a generation or more of inertia as to our merchant marine, port development in the United States began to be stimulated by the building of the Panama Canal and the change in trade routes which followed as a matter of course. With the construction of the Panama Canal, Congress adopted a policy requiring communities receiving Federal appropriations for rivers and harbors to co-operate in harbor improvements or to provide marine terminals. Competitive port development was thereby stimulated, and practically all the ports of the United States have been engaged in this effort more or less during the last ten years, during which time hundreds of millions of dollars have been spent or contemplated in port improvements.

The relation of Canada to the United States is so intimate that it cannot be left out of consideration in any discussion of ports. Scores of millions of dollars are being spent or in contemplation by Canada in the development of waterways, terminals and steamship lines for the transportation of Canadian products.

While we must consider every port in the United States as a part of a great national system, only New York, Philadelphia and Baltimore primarily, with Providence and Portland secondarily, can be fairly regarded as sufficiently important to be considered as commercial competitors of Boston which, with New York, has the advantage over all the other first class Atlantic ports of being directly on the ocean, and is a day's journey less to Europe than any competitor. Boston has also channels sufficiently broad and deep to accommodate the largest vessels afloat, and given a co-operative use of all existing railroad facilities, has present accommodations for twice the business which comes to the port.

Speaking generally, the spending of these millions of dollars on port development has been actuated by local ambitions, without consideration as to a national program, or attempt to remove the essential handicaps which now exist and menace the successful utilization of our Atlantic ports as factors in developing foreign trade. Of all the port development which has been made in the United States during the last twenty years, only two cities in this country, New Orleans and San Francisco, and Montreal in Canada have by wisely and bravely meeting the situation before them, reorganized their port facilities and administration to make easy the interchange of commodities from rail to ship, and vice versa. These ports are properly run without cost to the tax-payers, and conditions there as regards the receipt, forwarding and shipment of goods are such that commerce is encouraged to come to the ports.

New York is in a class by itself; its main problem is to provide facilities for increasing business. The other Atlantic ports are striving to get business for their existing facilities. New York is not able to handle economically or profitably the business which comes to its railroads or shippers, and the utilization of all our ports as national assets would not only benefit New York by relieving the stress upon it, but the surplus business which cannot economically be handled in New York can easily keep our other principal ports busy.

While the development of the Port of Boston should be carried out in the spirit that it is the shipping point for all New England, its community value to Boston* makes it of such special importance locally that it is worth brief consideration.

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* Supplementary Report, Directors of the Port of Boston, March 1915.

The actual expenditure of an overseas steamer bringing miscellaneous cargo to Boston and taking similar cargo out varies from $4,000 per trip to $35,000, the average being not less than $7,500. It is a fair estimate under normal conditions that for handling foreign and coastwise vessels in and out, there is a yearly expenditure in this port of over $5,000,000 or about $17,500 per day.

Thus the business of handling ships is the equivalent in community expenditures of a factory employing 8,000 male hands, and, reckoning three dependents to each male, supporting 32,000 people.

This expenditure does not include the cost of docking and repairing ships in Boston; the value to the community of the ships' crews and their families who are domiciled here; the clerical forces employed on the piers, local freight and passenger offices; the taxes on real property owned by the lines in question or leased by them; the hundreds of barges and sailing craft, supplying Boston with coal and lumber; the lighters, draymen of coarse carload freight employed to transship between the land and water carriers, nor the cartage firms which transfer package freight.

Not only does the community derive benefit from the immediate handling of the cargoes, etc., but there is the benefit to the port from the warehousing of the apples, wool, cotton, tea and other exports and imports awaiting shipment or transference. The seaport banker earns his commissions by financing the export shipments, discounting drafts, drawn on foreign buyers, remitting funds for the importers for their purchases abroad; supplying letters of credit for foreign travel; and forwarding the savings of the immigrants to their families on the other side. Added to this are the insurance of the cargoes and ships at Boston, and the passengers travelling to and fro through the port spending money at hotels, theatres and shops.

The manufacturer located at or near this Port has the advantage, with proper railway and transfer connections, of having his raw material which comes oversea or coastwise near his factory, while labor of less skilled type is improved by the landing at the seaport of thousands of foreigners looking for work.

VI.

THE HANDICAPS AGAINST BOSTON'S COMMERCE

New England railroad construction is substantially at an end. Future extensions will largely be in improved terminals and interchange connections. The truth of James J. Hill's statement made in 1912, that the railroad problem is at bottom a terminal problem, is daily being brought home to Boston. The flow from a bottle is measured by the size of its neck.

The coastwise lines in Boston are of the greatest service to New England, and profitable extension can undoubtedly be made in additional coastwise lines to build up local trade, transferring food and manufactured products between New England ports. Speaking generally, the network of overseas lines to Boston is only in its infancy. A line to the Gulf would be of great service to New England. In the West coast trade, via the Panama Canal, the combination rail and ocean rate via Boston and Panama is cheaper for shippers as far West as Buffalo, than the all rail rate. The Panama-Pacific service out of Boston, which had a good start in Boston before the war, has been suspended because of the increased earnings for ships in charters for Europe to carry war supplies. Such a service has infinite possibilities of good for Boston. It means cheaper building materials and West coast products for New England, besides adding to our markets on the west coast for the disposal of our manufactured articles. The extension of New England's markets in the future is largely dependent on water transportation.

The position of any port depends primarily on the volume of freight that can be concentrated from or distributed to the interior. When service is inefficient and charges are comparatively high, the business of the port inevitably suffers.

With the exception of Commonwealth Pier 5 at South Boston, the overseas piers of Boston are owned by the local railroads, and considered as a part of their local railroad terminals, no steamship ordinarily being allowed to berth at the terminal of more than one railroad; traffic with other local roads being subject to the Boston rate and a switching charge in addition. The result is that on competitive exports and imports within New England, the railroad pier owners have switching charges high enough to discourage competition by any other railroad except via the piers with which it has direct connection. This in effect discourages export and import business through the port of Boston.

The economic basis in the successful operation and upbuilding of a port is transportation service, and freight rates. In this the dominant feature is the so-called load factor. When a vessel has a full load each way on every trip, it will operate at the maximum efficiency per unit cost of cargo. If there is enough freight in one direction, and not enough in the opposite to furnish a full load, or freight is offered irregularly in either direction, or varies throughout the season, ships will be uneconomically employed and vessels must be diverted to other ports. This means poor, indirect, delayed service. Vessels bringing in hides to Boston from South America must go in ballast to some other port for their return cargo to South America. Much of the export and import business of cities like Lawrence and Lowell is now done through the port of New York, which does half of the whole nation's business. These ships from South America sent in ballast from Boston to New York for their return cargo, may and frequently do take back products manufactured within a short rail haul from the Port of Boston.

The Port of Boston should serve industrial New England as a channel for securing foreign raw materials for its shoe factories, for its woolen, cotton, carpet, sugar and paper mills, and all obstacles should be removed to secure these products in as easy and economical a manner as possible. The imports at Boston are made up chiefly of hides and skins, Egyptian cotton, raw wool, burlaps, sugar cane, fibrous wood pulp and other raw materials. The exports at this port consist largely of meat products, raw cotton (by transshipment from vessels from southern ports) and breadstuffs. The coastwise trade at the port of Boston consists largely of coal, cotton and lumber.

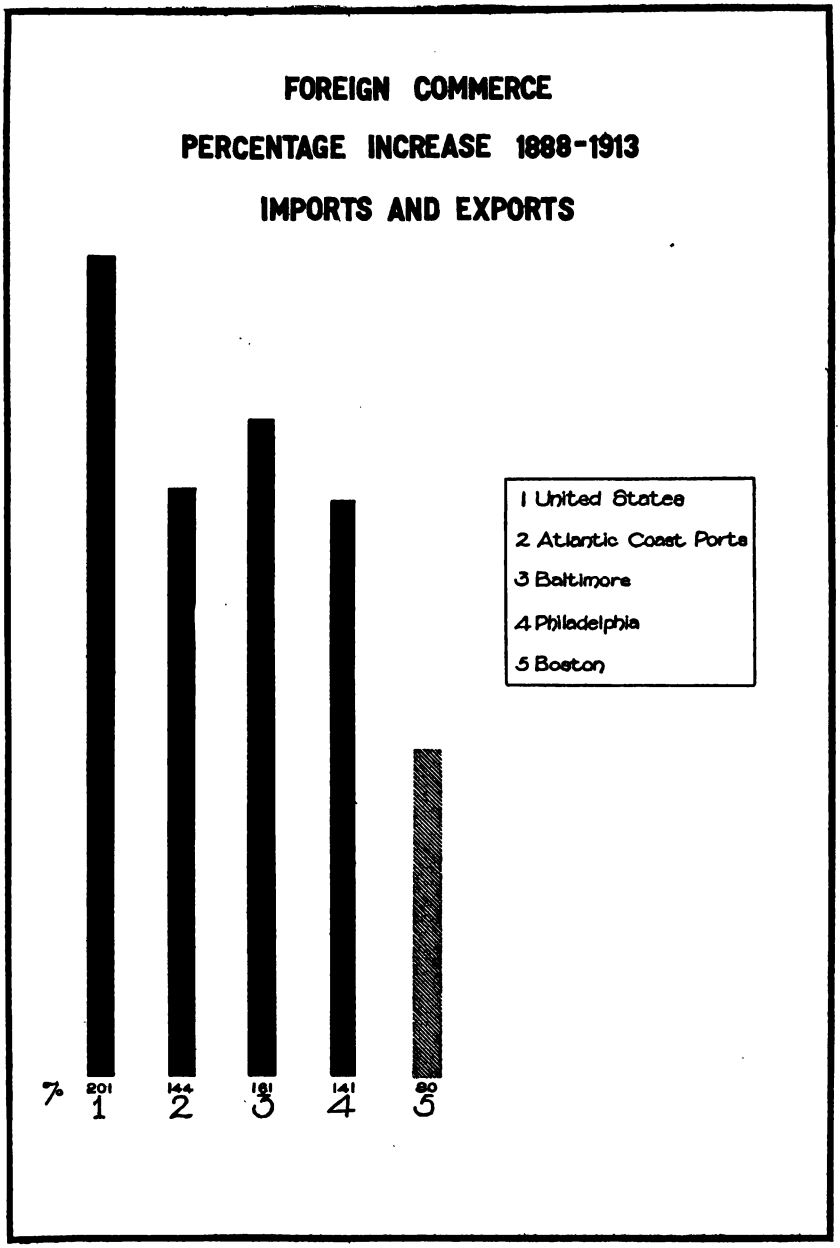
During recent years the Dominion of Canada has spent millions of dollars on its canal system connecting the Great Lakes with the St. Lawrence River and the sea, the use of which is given free to American ships and products. While this expenditure is undoubtedly actuated in part for military reasons, as is also the millions being expended on port development at Halifax, which will give Canada a winter port, the freedom of canal facilities given by Canada is primarily to ensure that the load factor to Canadian ports shall be constant, and it is this load factor to which Massachusetts should also give attention.

When outward and returning freights are unequal as at Boston, the average cost of handling cargo brought here is increased and the use of this port discouraged. Baltimore and Philadelphia because of artificial rail rate distinctions are to-day sending out scores of cargoes which should ship through Boston with its distinct advantage of being one day nearer to Europe. This artificial rail rate distinction explains the increase of Philadelphia and Baltimore over Boston in the percentage of imports and exports for the 25 year period, 1888 to 1913, as shown in Chart 8. For the trade from Montreal, which is shut off during the months that the St. Lawrence is frozen over, the natural winter port is Boston, being 271 miles nearer Liverpool than New York and 54 miles nearer Montreal than New York. A vessel coming regularly to Boston from any point in Europe, as against a vessel going to Baltimore, can make an additional round trip a year.

THE RAIL RATE DIFFERENTIAL

For many years Boston has been suffering under the handicap of the so-called rate differential in favor of other Atlantic

CHART 8.


FOREIGN COMMERCE
PERCENTAGE INCREASE 1888-1913
IMPORTS AND EXPORTS
1 United States
2 Atlantic Coast Ports
3 Baltimore
4 Philadelphia
5 Boston
%
201
1
144
2
181
3
141
4
80
5

ports. A generation ago the freight rate between Boston and New York and European ports by vessel was, because of the shorter distance and better channels, less than between other Atlantic ports and Europe. To equalize the through rate between Buffalo for example, and European ports, the rail rate to Philadelphia and Baltimore was made less than from New York and Boston. Later, however, the steamship rate to all Atlantic points was equalized, thus resulting in making it cost more to send goods from Buffalo and points west through Boston and New York than through Baltimore and Philadelphia. Repeated efforts have been made, notably by the Boston Chamber of Commerce in 1912, to have the railroad freight rates at Boston and New York placed on the same basis of rates as at Baltimore and Philadelphia, in the same manner as the rail rate to all the Gulf ports, which have greater variation in distance from Chicago than Chicago has to the Atlantic ports, has been equaled, but this has not been successful.

The Shipping Board, provided by the Act recently passed by Congress, must give attention to the existing discrimination, which prevents Boston from doing the business which its natural advantages entitle it. If the maritime business of the United States is to be built up as a national asset, it must be done without favoritism, and all the ports wherever situated allowed to progress and prosper. The need for the total elimination of favoritism in the transportation business, which is the real function which the Interstate Commerce Commission was created to perform for the American people, is apparent. A multiplicity of other pressing duties has prevented consideration of this special matter. As recently as September 5th of this year, however, a decision was given by the Interstate Commerce Commission in connection with the complaint of various iron and steel companies vs. the ore carrying roads of the Eastern Great Lakes Region which decides that the propriety of the complete division of charges for each important service performed is not only recognized, but is put in force. This decree is most important because the average terminal cost bears such an over shadowing relative importance to the total transportation cost for rail movements, that manifestly in justice to all they should be charged for separately in accordance with the amount of service rendered.

It is estimated by a railroad executive of national reputation,* accepted as authority on transportation subjects, that for a movement of freight between New York and Philadelphia, 90 miles, the total rail haul cost may be almost ignored in the total cost of the movement, the rail haul being only one-eighth of the total terminal cost in this case.

In addition, and of great importance to Boston, is the petition of the state of New Jersey before the Interstate Commerce Commission for the separation from the New York rail freight to interior points of the terminal cost of freight transference in New York harbor. While the special problems involved in the New Jersey petition are different from the problems facing the port of Boston, their consideration and decision will inevitably effect the situation here.

The fact seems to be that railroad executives in New England are beginning to see for themselves that the present situation is an intolerable one. Upon the Boston and Maine and the Boston and Albany roads should not be placed the burden of carrying and maintaining the port of Boston. The experience of New Orleans, San Francisco and Montreal has shown that the railroads which opposed the proper development of these ports, now on a self-supporting basis, are now convinced that it was the best thing that ever happened in the railroad's selfish interests and they would not go back to former conditions, if they could.

Chart 9 shows the air line distance from the various Atlantic seaports to the South and West and the freight miles and the cost for first class freight from the various Atlantic port cities.

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* W. J. Wilgus, C. E.

CHART 9.

COMPARATIVE AIR LINE MILEAGE FROM ATLANTIC SEAPORTS TO SOUTH AND WEST

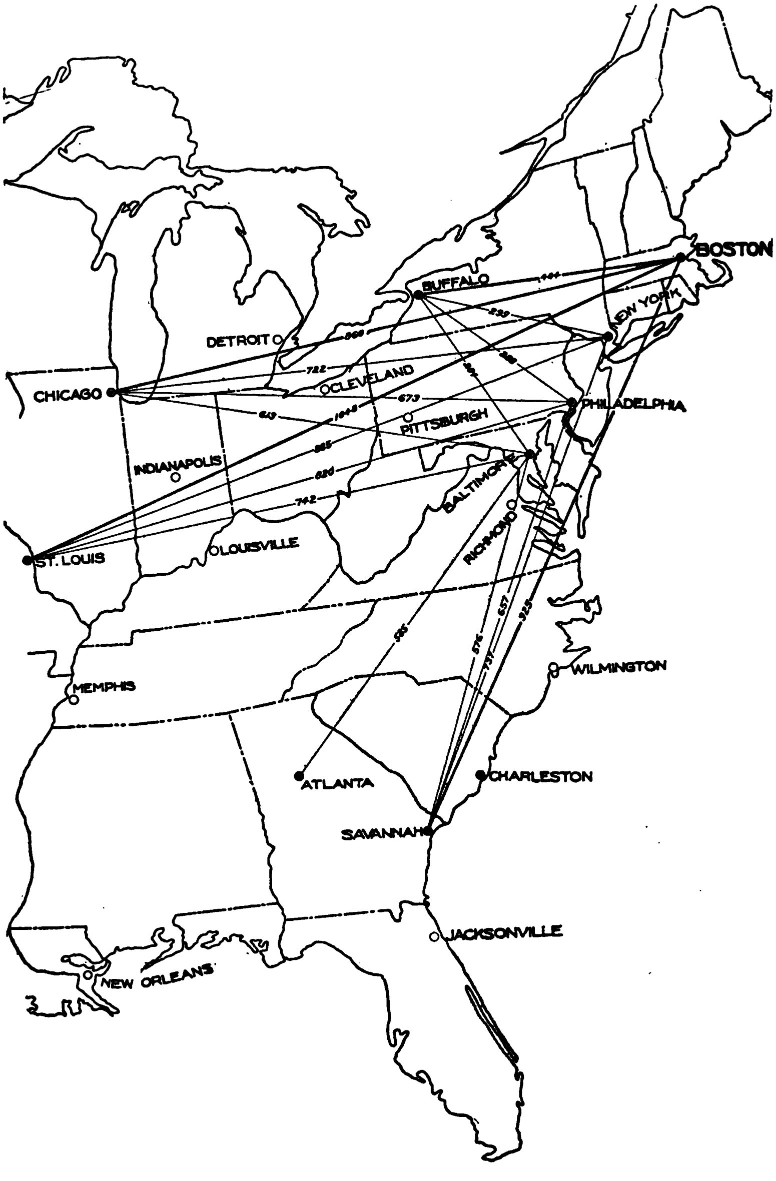

Table of Freight Rates to accompany this map will be found on page 51.

VII.

FREE DOCKAGE OR WHARFAGE.

The port difficulties at Boston are historical, and can be traced back a generation, to a time when the Massachusetts railroads, constructed free terminals to attract to the port of Boston for the benefit of their own lines, a larger part of the export and import freight movement of the Atlantic seaboard than was falling to Boston through the regular agencies then established.

New York has always had, and undoubtedly always will have, the advantage of being a concentration point and financial center where shippers from all parts of the United States can send their surplus goods for a "spot" market. If they are not sold in New York they can be disposed of by sending them as export to Europe on one of the numerous foreign lines leaving that port.

State or municipal enterprises having failed at that time to give indication of any intent to supply the marine terminal facilities necessary for handling this line of business, Massachusetts railroads began the construction of water terminals which at first may have appeared to be profitable. This work of building terminals was continued until, so far as Boston and also Philadelphia and Baltimore were concerned, the marine end of the railroad business was the most important single source of rail freight.*

The result of the growth of this system is that the free use of water terminals at Boston, Philadelphia and Baltimore during the last generation has been completely dominated by the land transportation companies, and private and public investment in wharf property has been negligible.

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*Free wharfage in certain American Ports and its effect on their development by John Meigs, Philadelphia, at Association of Port Authorities, Montreal, Canada, September, 1916.

During the time these railroad terminals were being built, maintained and extended by the railroads, the attention of the business community generally was engrossed in other lines of activity. This monopoly by the railroads of the overseas waterfront has made private and public investment unprofitable because of the practice of free wharfage on the railroad-owned piers. No owner of wharf property in Boston, unless used in connection with coastwise shipping or individual manufacturing and industrial operations, can conduct wharves on a profitable or even a self-carrying basis.

Under this easy-going system of rapid and unscientific commercial growth no effort to ascertain the true cost of railroad terminal service or the proper levying of charges for them was made. As time went on and the railroads and steamship corporations widened their activities and community of interests, mutual agreements became very close. The cost of the construction and maintenance of railroad marine terminals was taken care of in the so-called absorption of cost into the general expense account, and their partial recovery through the general freight carrying traffic. In spite of the liberality of the railroads, New York continued to make enormous progress, notwithstanding the fact that the physical handling of marine freight in that harbor is more expensive than in competitive ports, and that for freight destined for interior distribution its rail tariffs are higher than those at many competing points.

The construction of Commonwealth pier at Boston for example, one of the largest and finest structures of its kind in the world offered to foreign steamship lines practically without cost, while New York is exacting a full interest return on its water terminal investments, does not overcome the handicap of the adverse "load factor" or the additional freight rates necessary to be paid if vessels receive or send out their goods at this port.

The Massachusetts railroads, originally keen to engage in this business, now that they have secured substantial control of the waterfront and over the ocean carrying business, have begun to realize that this business under conditions of free wharfage is unprofitable, and for years have not spent any money for extension of wharf facilities.

As a result of a study made by the Directors of the Port of Boston in 1915,* it was shown that aside from the indirect return to the roads doing the transatlantic business which concentrates at this port, the Boston and Albany and Boston and Maine are jointly doing their export and import business at an annual loss of $1,383,140 a year, to which must be added the estimated annual loss to the Commonwealth through the construction of Commonwealth Pier 5, which serves as a terminal of the New Haven road, of $340,000.

This loss is substantially the carrying cost of the terminals which are given free to transatlantic ships. That this loss of $1,723,140 a year is a moderate estimate is not now disputed, and has been used as a basis of argument by the Boston and Maine railroad in a recent case before the Interstate Commerce Commission at Boston.

SWITCHING AND TERMINAL FACILITIES.

Modern competitive conditions demand that the first element of a properly organized industrial district is that the producer and seller shall have free choice of despatching goods over the most convenient railroad in the territory to reach customers either in the domestic markets or abroad. This means sometimes one line and sometimes another line. No matter how extensive any road may be, it cannot reach all the points in any given district, but under proper railroad transfer and interchange conditions, each railroad should be as efficient as any other.

New England manufacturers, who are tied up to a single line of railroad and under the disadvantage which this situation carries with it, are now going through the same difficulty that obtained in New Orleans before the reorganization of that port. If Massachusetts manufacturers expect to be free to work out their problems to a successful end, and sell their surplus products in competition in the domestic market or in the foreign field, they must have the advantage of a free and unhampered movement for their goods in all sections of the port or to any interior point behind it. The division of ports into forced zones, each zone available only to one road except under restrictions, is entirely out of date.

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* Supplementary Report Directors Port of Boston 1915.

Practically, all New England is nearer Boston than New York, and every New England interior point with lower freight rates to Boston than New York, saves just that difference on shipments sent through the Boston gateway, ocean rates being generally the same for both ports. Under present conditions, however, Lawrence, Lowell, Worcester, Fitchburg and all the great New England industrial cities, use New York instead of Boston for their export trade because it is easier, cheaper and quicker for them when sending goods to the foreign market, to send them under existing conditions via New York.

The result of the situation is the unequal load factor which has kept the tramp ship out of the port of Boston and increased the unit cost of the regular liners coming to the port. In this situation New England which has depended on long distance transportation for its food, raw materials and coal for fuel, must stand as a united district or in the end yield its industrial supremacy. For example, the fact that it is possible to get coal for New England manufactures by water proves this. If New England factories had continued to remain dependent on all-rail transportation for their fuel, this would have meant a tremendous handicap in the fuel item both in price and service. In every region in the United States where raw materials are produced, the effort is being made to supplant our New England product with local factories, and these competing states generally have the advantage of having available to them a combination of markets reached by the railroads.

In addition to the general factors of free wharfage and the rate differential, operating against the development of the port, there is a lack of facilities for the transportation of property to, in and from with relation to the port of Boston.

Since 1891, a score of formal reports by commissions and public boards have been made on the question of the readjustment of terminal facilities of the steam roads entering Boston, in the effort to create or coördinate facilities so that the present waste and loss of time might be overcome. It is estimated that the cost of these various reports on this special matter during the last twenty-five years has been more than a quarter of a million dollars. Commission after commission has gone part way in the problem, and then recommended that the work be passed on to another commission to be created subsequently.*

During the present year, two important studies have been made on this subject, one by the Terminal Commission appointed under chapter 144 of the Resolves of 1915 and chapter 382 of the special acts of 1915 and another by the Directors of the Port of Boston, both of which agree that there is and has been for a long time something radically wrong with the transportation system of metropolitan Boston, that there is a general agreement that the present terminal facilities could and should be greatly improved; and that all over the United States, in the cities where similar problems exist, the minds of traffic experts stripped of their bias is in general accord.

Detailed analysis of the reports of the last two decades and of the special reports of this year are not necessary here. It seems definitely to be established, that the inability of New England shippers to route freight except over one line, has resulted in extraordinary differences in charges for identically the same service, and that there is delay in the transmission of goods and long detours, all of which tends to increase the cost and discourage the transaction of business through the port.

The condition being accepted, the remedies offered have varied from:

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*"To the struggles between radical and conservatives, to selfishness and short sightedness on the part of the heads of transportation companies, the failure of Boston to make the proper progress in connection with its terminal facilities may be largely attributed." — *Page 17, Report of the Massachusetts Terminal Commission* 1916.

State ownership of all the terminals involved, at an expense of scores of millions of dollars, which would come out of taxes.

Water lighterage, which can be accomplished at a comparatively small expense, and will probably reduce the present switching charges by more than one half their present amount, and shorten transfer from seven or more days to a few hours!

The construction of a teaming boulevard between the north and south terminals which will make possible the establishment of an economical cheap motor trucking transportation system.

The extension of existing street railway facilities to transfer freight between the two terminals.

The construction of a direct rail connection between the entrance to the Grand Junction railroad of the Boston and Albany at Cottage Farm, and the freight yards of the New Haven road at the South Bay. Used coöperatively this would make a belt line connecting all parts of the port with all railroads and provide a terminal service comparable to that at New Orleans which has done so much for that city.

Connection under the harbor between the terminals, by railroad and teaming tunnels, is another idea for the future.

Careful consideration of all these various reports leads to the conclusion that Boston must, first: realize its need and its opportunity in terminal and transfer improvement so that an agreement on fundamentals will be forced, and second: that if there is not actual combination of transportation facilities, there at least be actual coöperation of all existing transportation facilities and third: relief in the least expensive way should be found immediately so that results may show that the more expensive projects proposed will later be justified. While the solution of the problem must eventually come through action by the Legislature, immediate action for relief is so vital to the business interests and shippers of the Metropolitan district that they should take the lead in pressing for public consideration of this matter.

VIII.

CONCLUSION.

While it is necessary to call attention to the special causes working against the progress of the Port of Boston, hampering its opportunity to take full advantage of its natural right to get a share of the foreign trade movement now being nationally built up, the main difficulty today as it has been for the last twenty-five years, is not that the obstacles are insuperable, but lack of public interest in them. The main question is treated as being political, and partisanship on both sides has too often refused to recognize the good points in an opponent's program, and in the public interest to be willing to reconcile whatever differences exist.

Since the Civil War, the economic history of the United States is one record after another of obstacles and impediments in the way of laws and regulations against the building up of a merchant marine. To attempt to locate the responsibility would be of little present value, because it now appears that all parties and all interests have been more or less at fault. That this is essentially a non political question was shown in the forties when the United States did build up a real merchant marine and control of the seas. All that our shipping needs for success is a real chance, and not false charity. In both England and Germany, the question of foreign trade and the disposal of surplus products is accepted by all parties as a national patriotic problem and political division over these questions is not permitted. This is largely the secret of the commercial success of these nations.

The history of local port development during the last decade is an interesting one, and the mistakes which have been made in Boston as well as at other ports in this country are only history repeating itself. In the initial stages of their growth, all the great ports of Europe went through similar discouraging experiences, but after a period of storm and recrimination the benefits of the mistakes were utilized and the essential problems successfully worked out.

This is a time when, in self interest, joint consideration and mutual toleration should be the rule. The ideal aimed at when the legislature created the Holding Company which permitted joint operating control of the New Haven and the Boston and Maine Railroads was to make this port a transportation and delivery unit. The expenditures on both sides of Boston Harbor under the nine million dollar Port of Boston appropriation, which was made by the Legislature in 1911, were begun in the belief that this situation was to be permanent. The change in policy of the Commonwealth, which dissolved the so called "merger," made this state investment in Boston Harbor development unprofitable and comparatively unimportant in settling the real problems of the port. In addition, these expenditures involve a yearly loss in carrying charges to the State Treasury, which if a remedy is not speedily found, will become an intolerable tax burden to the Commonwealth.

The future has brilliant possibilities. In 1915, a revision of the harbor lines at the port was made, which contemplates the development of a vast area of submerged flats between Governors Island and Jeffries Point, East Boston. Work on the reclamation and filling to street level of these flats, and in deepening and extending the channels, by the utilization of material dredged which was formerly wasted by being dumped at sea, is now under way. Land is thus being made at small cost to the Commonwealth, and with the settlement of the traffic problems herein discussed, these areas under state control will provide places for industries to be located at reasonable rentals, with as good facilities for doing export and import business as can be found in the United States. The development of these state flats and the extension of the water front area available for industries, if the hopes of the port authorities are carried out, will ultimately provide assets which will offset all previous port expenditures and provide an income adequate to keep Boston port development in advance of the actual needs.

Patriotism and the desire for public service are not the monopoly of any institution, party or individual, and it is exceedingly to be desired that the people of New England will unite in this campaign for foreign trade, to the end that the obstacles to the development of the greatest of all New England's assets, its ports, will be removed; its waterways like the Connecticut and the Merrimack made available for the business needs of the industries on their banks, which will bring lessened cost of freight and improved service; and that the railways, relieved of their present burdens of free terminals, shall be enabled to improve their terminal and transfer service, so that the Port of Boston shall be utilized, our wage earners continuously employed and business generally stimulated: — a program which should appeal to the pride and common sense of New England.

APPENDIX.

TABLE I.

COMPARATIVE INDUSTRIAL STANDING OF MASSACHUSETTS AND OTHER POLITICAL DIVISIONS

All Manufactures

1880-1910

State or Division	Value of the Product. Last 000 omitted.				
	1880	1890	1900	1905	1910
United States	$5,369,579	$9,372,437	$11,406,927	$14,793,903	$20,672,052
New York	1,080,697	1,711,578	1,871,831	2,488,346	3,369,490
Pennsylvania	744,818	1,331,795	1,649,882	1,955,551	2,626,742
Illinois	414,865	908,640	1,120,868	1,410,342	1,919,277
Massachusetts	631,135	888,160	907,627	1,124,092	1,490,529
Ohio	348,298	641,688	748,671	960,812	1,437,936
Michigan	150,715	277,897	319,692	429,120	685,109
Connecticut	185,697	248,336	315,106	369,082	490,272
Rhode Island	104,163	142,501	165,550	202,110	280,344

TABLE II.

PERCENTAGE INCREASE IN VALUE OF PRODUCT

All Manufactures

State or Political Division	Per Cents	
	1880–1910	1900–1910
United States	285	81
Illinois	363	71
Michigan	355	114
Ohio	313	92
Pennsylvania	253	59
New York	212	80
Rhode Island	169	69
Connecticut	164	56
Massachusetts	136	64

TABLE III.

PER CENT OF TOTAL MANUFACTURES OF THE UNITED STATES FOR EACH STATE

State	Per Cents				
	1880	1890	1900	1905	1910
New York	20.1	18.3	16.4	16.8	16.3
Pennsylvania	13.9	14.2	14.5	13.2	12.7
Illinois	7.7	9.7	9.8	9.3	9.3
Massachusetts	11.8	9.5	8.0	7.6	7.2
Ohio	6.5	6.8	6.6	6.5	7.0
Michigan	2.8	3.0	2.8	2.9	3.3
Connecticut	3.5	2.6	2.8	2.5	2.4
Rhode Island	1.9	1.5	1.5	1.4	1.4

TABLE IV.

COMPARATIVE PRODUCTION OF BOOTS AND SHOES

1880-1910

State or Division	Value of Product. Last 000 omitted				
	1880	1890	1900	1905	1910
United States	$166,050	$220,649	$290,047	$357,688	$512,798
Massachusetts	95,900	116,388	141,239	173,680	236,343
Missouri	1,983	4,841	11,456	23,541	48,751
New York	18,979	23,661	28,117	37,521	48,186
New Hampshire	7,231	11,986	23,766	22,834	39,440
Ohio	4,167	8,490	18,246	25,735	31,551
Pennsylvania	9,590	10,355	13,830	14,884	20,219
Illinois	3,183	8,757	10,499	9,993	16,755

TABLE V.

PERCENTAGE INCREASE IN VALUE OF PRODUCT, BOOTS AND SHOES

State or Division	Per Cents	
	1880–1910	1900–1910
United States	209	77
Missouri	2,358	325
Ohio	657	73
New Hampshire	445	66
Illinois	426	60
New York	154	71
Massachusetts	146	67
Pennsylvania	110	46

TABLE VI.

PER CENT OF TOTAL BOOT AND SHOE MANUFACTURES OF UNITED STATES FOR EACH STATE

State	Per Cent				
	1880	1890	1900	1905	1910
Massachusetts	57.7	52.7	48.6	48.6	46.1
Missouri	1.2	2.2	3.9	6.6	9.5
New York	11.4	10.7	9.7	10.5	9.4
New Hampshire	4.4	5.4	8.2	6.4	7.7
Ohio	2.5	3.8	6.3	7.2	6.2
Pennsylvania	5.8	4.7	4.8	4.2	3.9
Illinois	1.9	4.0	3.6	2.8	3.3

TABLE VII.

COMPARATIVE PRODUCTION OF COTTON GOODS

1880–1910

State or Division	Value of Product. Last 000 omitted				
	1880	1890	1900	1905	1910
United States . . .	$192,090	$267,982	$339,200	$450,468	$628,392
Massachusetts . .	72,290	100,203	111,125	130,069	186,462
North Carolina . .	2,554	9,563	28,373	47,254	72,680
South Carolina . .	2,896	9,800	29,724	49,438	65,930
Rhode Island . . .	22,875	27,310	26,436	34,573	50,313
Georgia	6,482	12,036	18,458	35,174	48,037
Pennsylvania . . .	11,021	18,432	25,448	26,300	33,917

TABLE VIII.

PERCENTAGE INCREASE IN VALUE OF PRODUCT COTTON GOODS

State or Division	Per Cents	
	1880–1910	1900–1910
United States	227	85
North Carolina	2,746	156
South Carolina	2,177	122
Georgia	641	160
Pennsylvania	208	33
Massachusetts	158	68
Rhode Island	120	90

TABLE IX.

PER CENT OF TOTAL COTTON MANUFACTURES OF UNITED STATES FOR EACH STATE

State	Per Cents				
	1880	1890	1900	1905	1910
Massachusetts	37.6	37.4	32.8	28.9	29.7
North Carolina	1.3	3.6	8.4	10.5	11.6
South Carolina	1.5	3.7	8.8	11.0	10.5
Rhode Island	11.9	10.2	7.8	7.7	8.0
Georgia	3.4	4.5	5.4	7.8	7.6
Pennsylvania	5.7	6.9	7.5	5.8	5.4

TABLE X.

FREIGHT MILES BETWEEN ATLANTIC PORTS CITIES

Also freight rate, first-class, per 100 lbs.

To	From							
	Boston		New York		Baltimore		Philadelphia	
	Miles	Cts. per 100 lbs.	Miles	Cts. per 100 lbs.	Miles	Cts. per 100 lbs.	Miles	Cts. per 100 lbs.
Atlanta, Ga.	1089	105.	876	105.	689	98.	784	105.
Buffalo, N.Y.	479	46.3	411	41.3	382	41.3	416	41.3
Charleston, S.C.	952	57.	739	57.	552	54.	647	57.
Chicago, Ill.	1002	78.8	908	78.8	782	70.8	817	72.8
Cincinnati, Ohio	925	68.6	751	68.6	578	60.6	659	62.6
Cleveland, Ohio	662	55.9	576	55.9	449	47.9	484	49.9
Detroit, Mich.	703	61.5	638	61.5	609	53.5	630	55.5
G'd Rapids, Mich.	858	75.6	790	75.6	728	67.6	762	69.6
Huntington, W.Va.	885	68.6	673	68.6	504	60.6	581	62.9
Indianapolis, Ind.	946	73.3	812	73.3	686	65.3	720	67.3
Jacksonville, Fla.	1195	67.	982	67.	795	67.	890	67.
Louisville, Ky.	1039	78.8	865	78.8	692	70.	773	72.8
Pittsburg, Pa.	653	52.3	441	47.3	314	39.3	349	41.3
Richmond, Va.	556	47.3	343	33.6	156	27.6	251	31.6
St. Louis, Mo.	1187	92.2	1054	92.2	917	84.2	962	86.2
Savannah, Ga.	1058	57.	845	57.	658	57.	753	57.
Wilmington, N.C.	802	68.	589	63.	402	57.	497	63.
Winston-S'm N.C.	757	89.	544	84.	357	78.	452	84.

BIBLIOGRAPHY

SHORT LIST OF BOOKS, PAMPHLETS AND ARTICLES ON PORT ADMINISTRATION AND THE ESSENTIALS OF FOREIGN TRADE

GENERAL

Department of Commerce, Washington, D. C.

Numerous books, pamphlets and periodic reports on subjects referring to foreign trade. Write for information on any special subject to the Director of the Bureau of Foreign and Domestic Commerce, Department of Commerce, Washington, D. C.

"Analysis of the present Foreign Trade of the United States."

Bulletin 3. Directors of the Port of Boston, Boston, Mass. January 1, 1916.

"The Use and Benefits to Massachusetts Manufacturers and Wage Earners of an American Merchant Marine."

Bulletin No. 2. Directors of the Port of Boston, Mass., 1915.

"The American Merchant Marine — What it has been. What it is. What it ought to be."

Boston Chamber of Commerce Bulletin, November 1915.

National Foreign Trade Council, Publications. India House, Hanover Square, New York City.

"The Future Foreign Trade" by James J. Hill.

"The Relation of the Merchant to Export and Import Trade" by George L. Duval.

"Foreign Trade as Affected by the Sherman Law," by John D. Ryan, President of the Anaconda Copper Mining Company.

"Foreign Trade and Foreign Loans," by Willard Straight, Vice-President of the American International Corporation.

"The Panama Canal and Latin American Trade Possibilities," by Edward N. Hurley.

"The Problems of War and Commerce," by Hon. James Bassett Moore.

"Government Regulation of Commerce as Affecting Foreign Trade," by W. L. Saunders, Chairman of the Board of the Ingersoll-Rand Company, New York.

"Problems of the Smaller Manufacturer and Merchant in the Development of Foreign Trade," by William C. Downs, United States Commercial Attache for Brazil; and Mr. H. C. Lewis, Manager, National Paper and Type Company.

"The War and American Foreign Trade," by James A. Farrell, President United States Steel Corporation.

"World Trade Conditions after the European War," by Alba B. Johnson, President Baldwin Locomotive Works.

"Foreign Investment of American Capital as an Aid to Our Foreign Trade," by James A. Farrell, President United States Steel Corporation.

"The Problem of Anti-Dumping Legislation," by Henry C. Emery, former Chairman United States Tariff Board.

"Necessity for an American Dye Stuffs Industry to Aid Export Trade in Textiles," by Henry Howard, President Merrimac Chemical Company, Boston.

"Commercial Education for Foreign Trade," by Wallace D. Simmons, President, Simmons Hardware Company, St. Louis.

"The Development of a National Shipping Policy," by Captain Robert Dollar, San Francisco.

"Export Co-operation to Meet World Trade Conditions after the War," by M. A. Oudin, Manager Foreign Department of the General Electric Company.

"Export Trade and the Anti-Trust Laws," by Gilbert H. Montague, New York City.

"Organization and Management of Foreign Selling Forces," by T. W. Van Koken, Barber Supply Company, St. Louis.

"Some Elements of National Foreign Trade Policy," by Frank A. Vanderlip, President National City Bank, New York.

"Co-operation in Foreign Trade," by Hon. Joseph E. Davies, Chairman Federal Trade Commission.

"Ocean Shipping." The Basic principles of marine transportation with particular reference to the foreign trade of the United States.

"Report of the Committee on Co-operation in Foreign Trade of the National Foreign Trade Council on the Webb Bill Authorizing Combinations for Export Trade."

"South American Bandbook." Compilation of information and statistics regarding the public indebtedness, foreign commerce and railway development of the South American Republics.

Railway and Marine News, April, 1915.

"Chili, in Great Trade Possibilities of Latin America."

Railway and Marine News, July, 1915.

"Columbia, in great Trade Possibilities of Latin America."

Railway and Marine News, March, 1915.

"Peru, in Great Trade Possibilities of Latin America."

E. E. Pratt, in American Academy of Political and Social Science' May, 1915.

"Attitude of Business Towards Foreign Trade."

PORT ADMINISTRATION, ETC.

"Accounts of the various Methods of Administering and Operating Commercial Ports," by Paul Joly, Brussels, Int. Nav. Congress, 1905, 20 p.

"Additional Facts on Wharfage, Storage and Port Charges," by H. M. Chittenden. Railway and Marine News, May 1, 1915.

"Administration of European cities," by J. Pitzman, Jour. Assoc. Engineering Societies, Dec. 1915, 20 p., maps.

"Analysis of Present Operation of the Port of New Orleans with Present and Proposed System of Rates," by Ford, Bacon and Davies, New Orleans, Board of Commissioners of the Port of New Orleans, 1915.

"The Assessing of Scientific Port Charges and Basis and Method of Such Charges," by E. M. Loeb, Proceedings American Association of Port Authorities, 1915, 8 p.

"The Best Methods for the Development of Port Traffic and the Attraction of Business," by J. P. Gilmer, Proceedings American Association of Port Authorities, 1915, 2 p.

"The British System of Improving and Administering Port and Terminal Facilities," by J. R. Smith, Annals of the American Academy, Nov. 1904, 17 p.

"The Engineer's Part in Port Development," by F. L. Stuart, American Association of Port Authorities, 1914, 7 p.

"Few Well Equipped Ports Held to be Preferable to Many Poorly Equipped." Abstracted address of Halifax Harrison, Engineering Record, Feb. 12, 1916, 1 p.

"Supplementary Report," Directors of the Port of Boston, 1915.

"Reports of the Harbor and Land Commission of Massachusetts, 1900-1916."

"Reports of the Directors of the Port of Boston." 1912-1916.

"General Conditions of Transportation by Water," in Report of the Commissioner of Corporations on Transportation by Water in United States, Washington Government printing office, 1909. (Contents: Summary; waterways and their improvements; equipment employed in transportation by water; shipping laws and statistics; business organization; shipping contracts and documents, and some legal aspects thereof; marine insurance; taxation of vessel property and of navigating companies.

"Government Regulation of Water Transportation." Annals of the American Academy of Political and Social Science, July 29, 1913.

"The Ideal System of Port Charges and Administration. From the Port's Point of View." (In Proceedings of the Conference of the Port Authorities of the Pacific Coast 1914,) by J. H. McCallum, Seattle, June 1914, 6½ p.

"The Ideal System of Port Charges and Administration. From the Ship Owners point of View." (In proceedings of the conference of the port authorities of the Pacific coast, 1914), by Capt. Robert Dollar, Seattle, June 1914, 2 p.

"The Ideal System of Port Charges and Administration. From the Shipper's Point of View." (In proceedings of the conference of the port authorities of the Pacific coast, 1914) by Aelxander Baillie, Seattle, June, 1914, 2 p.

"The Influence of Privately Owned Facilities Upon the System of Public Operation in Ports where Private Ownership largely Prevails" (in proceedings of the conference of the port authorities of the Pacific coast, 1914) by Robert Bridges, Seattle, June 1914, 4 p.

"Legal Aspect of Port Organization," by J. de W. Warner, Proceedings American Association of Port Authorities, 1912, 3 p.

"Les Ports Maritimes de l'Amerique du Nord sur l'Atlantique," by E. T. Quinette de Rochemont and H. Vetillart. Paris 1898-1904. 4 vols., ill., pl., tab. Contents: P. to 1-Les ports Canadians. P. to 2-Regime administratif. P. to 3-Les ports des Etats-Unis. P. to 4-Atlas.

"Modern Terminal Port," by W. J. Barney. American Academy Political and Social Science, Annals, May, 1915, 13 p.

"Navigation Laws of Leading Maritime Countries," by G. M. Jones, Washington, Government printing office, 1916 (Dept. of Commerce, special agents series, No. 114).

"Port Administration," by W. J. Barney, Proceedings American Association of Port Authorities 1913, 26 p.

"Port Administration and Harbor Facilities." A symposium, American Academy Political and Social Science, Annals, March, 1907. 43 p. (Contents: New York City by J. A. Bensel; Chicago by Frederic Rex; Philadelphia by W. W. Pierson; Boston, by C. H. Swan; Buffalo by F. H. Mason; New Orleans by J. J. McLoughlin; Detroit by D. F. Wilcox; Washington, D. C. by D. E. Garges; Providence by F. E. Lackey; Wilmington, Del., by Ceyne and J. N. Lawson, Jr.; Duluth, Tampa, London, Manchester, Hamburg, Bremen, Barcelona, Antwerp.)

"Port Administration," with particular reference to the organization of a traffic department and the assumption of responsibility for goods, handling, issuance of warehouse receipts, advancement of charges, etc. (Proceedings of the conference of the port authorities of the Pacific coast, 1914, by G. M. Gordon, Seattle, June 1914, 4 p.)

"Port and Terminal Charges." (In water terminals, part III., of report to the commissioner of corporations on transportation by water in the United States.) Washington; Government printing office, 1910, 49 p. tab (ports of United States).

"Port Development," by J. F. Coleman, Proceedings American Association of Port Authorities, 1913, 8 p.

"Port Finances and Appropriations," by G. W. Norris, Proceedings American Association of Port Authorities, 1913, 10 p.

"Port Organization and Development," (discussion of the various systems in vogue and argument for commissions representative of the numerous interests involved.) Eng. Rec. Nov. 22, 29, 1913. 2 p.

"Problems of Port Development," by Edward F. McSweeney, Proceedings American Association of Port Authorities, 1915, 24 p.

"Public Ownership of Terminal Facilities Comprising Docks, Wharves and Landings," by W. A. Kernaghan, Proceedings American Association of Port Authorities, 1913. 4 p.

"Some Remarks on the Constitution of Port Authorities as Affecting the Organization and Development of Ports." Address to Institute of Civil Engineers, by A. G. Lyster, Engineering, Nov. 7, 1913. 7 p.

"Seaport Relations to Trade and Transportation," by Calvin Tomkins, Proceedings American Association of Port Authorities, 1914. 5 p.

"State Control Over Ports and Waterfront." E. F. Cresson, Jr., American Association of Port Authorities, 1914, 8 p.

"Synopsis of Report on Port Charges," by Board of Commissioners of port of New Orleans, New Orleans, 1915.

"Trade Organizations as a Benefit to the Commerce of the Port," by C. J. Cohen, Proceedings American Association of Port Authorities, 1914, 6 p.

"Industrial Development and Terminal Factors," by P. P. Whitman, Railway and Marine News, Feb. 1, 1915.

"Ocean Highways and Seaboard Terminals," (in Elements of Transportation) by E. R. Johnson, 3 p.

"Port Terminal Development, a Disucssion of Fundamental Problems," by P. P. Whitman, Proceedings American Association of Port Authorities, 1915, 17 p.

"Railway Services of a Port Including also the Question of the Absorption of Charges — from the Railway Point of View." (In Proceedings of the conference of the Port Authorities of the Pacific coast, 1914), by F. R. Hanlon, Seattle, June, 1914, 3 p.

"Railway Service of a Port, including also the Question of the Absorption of Charges — from the Port's Point of View." (In Proceedings of the conference of the Port Authorities of the Pacific Coast, 1914) by G. B. Hegardt, Seattle, June 1914, 4 p.

"Seaport Congestion and Its Relation to Transportation and Terminal Facilities," by Calvin Tomkins, Prof. National Conference on City Planning, 1910, 3 p.

"Studies for Combined Waterfront and Terminal Industrial Development," by Calvin Tomkins, New York; Department of Docks and Ferries, Aug. 1, 1911, 11 p. (Special report No. 2.)

"Terminal Facilities in Relation to Waterway Improvements," by G. A. Zinn, pro. mem. 1911, Vol. 3, 12 p.

"Water Terminal Problem," by G. E. Hooker, National Conference on City Planning, Proc. 1911, 2 p.

"What Makes Commerce, Harbor Development and Dock Efficiency? Cassier's Magazine. June, 1913. 13 p. ill.

"The Port of Boston," by Prof. E. J. Clapp, Yale University Press.

Report Massachusetts Terminal Commission, Public Documents, State House, Boston.

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